

FIGURES AND SEQUENCES (600-1-285P)

(locations of polymorphisms or sites of polymorphisms appear in bold underline)

FIGURE 1 AND SEQ ID NO:1

wild-type hKOR

1 atgactcccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgc
61 tgcctgcccc ccaacagcag cgcctggtt cccggctggg ccgagcccga cagcaacggc
121 agcgcggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
181 atcatcacgg cggtctactc cgtagtgttc gtcgtggct tggtgtggcaa ctcgctggtc
241 atgttcgtga tcatacgata cacaaagatg aagacagcaa ccaacattta catatttaac
301 ctggctttgg cagatgctt agttactaca accatgcctt ttcagagtac ggtctacttg
361 atgaattcct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgcccgtg
481 tgcccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
541 tgcacatctggc tgctgtcgct atctgttggc atctctgcaa tagtccttgg aggcacccaaa
601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
661 tggtgtggacc tcttcatgaa gatctgcgtc ttcatctttg ccttcgtat ccctgttcctc
721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
781 ggctcccgag agaaagatcg caacctgcgtt aggtatcacca gactggtctt ggtgtgtgt
841 gcagtcttcg tcgtctgctg gactcccatt cacatattca tcctggtgaa ggctctgggg
901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatagc cttaggttat
961 accaacagta gcctgaatcc cattctctac gccttcttg atgaaaattt caagcgggtgt
1021 ttccgggact tctgctttcc actgaagatg aggtatggagc ggcagagcac tagcagagtc
1081 cggaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
1141 tgacttagtcg tgga

FIGURE 2 AND SEQ ID NO:2

C852T polymorphism of hKOR

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1 atggactcccc cgatccagat cttcccgcccc gagccggcc ctacctgcgc cccgagcgcc  
61 tgcctgcccc ccaacagcag cgcctgggtt cccggctggg ccgagcccgaa cagcaacggc  
121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctcccccgc catcccggtc  
181 atcatcacgg cggctactc cgttagtggc gtcgtggct tgggtggcaa ctcgcgtggc  
241 atgttcgtga tcataccgata cacaaaagatg aagacagcaa ccaacattta catatttaac  
301 ctggctttgg cagatgtttt agttactaca accatgcctt ttcaagatgc ggtctacttg  
361 atgaattccct ggccctttgg ggatgtgtctg tgcaagatag taatttccat tgattactac  
421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg  
481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatatc  
541 tgcatactggc tgctgtcgct atctgttggc atctctgc当地 tagtccttgg aggcacccaa  
601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccaagatga tgactactcc  
661 tqqtqqqacc tcttcatgaa gatctgcgtc ttcatctttg ccttcgtat ccctgtctcc
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1 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
2 781 ggctcccgag agaaagatcg caacctcggt aggatcacca gactggctt ggtgggtgg
3 841 gcagtttcg ttgtctgctg gactcccatt cacatattca tcctggtgga ggctctgggg
4 901 agcacctccc acagcacacgc tgctctctcc agctattact tctgctgc cttaggctat
5 961 accaacagta gcctgaatcc cattctctac gcctttctt atgaaattt caagcgggt
6 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
7 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
8 1141 tgacttagtcg tgga
9

10 **FIGURE 3 AND SEQ ID NO:3**

11 **C948T polymorphism of hKOR**

12 1 atggactccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgcc
13 61 tgcctgcccc ccaacagcag cgcctggtt cccggctggg ccgagcccgaa cagcaacggc
14 121 agcgcggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
15 181 atcatcacgg cggctactc cgttagtggc gtctgggct tggggccaa ctcgctggtc
16 241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
17 301 ctggctttgg cagatgcttt agttactaca accatgcctt ttcagagtac ggtctacttg
18 361 atgaattcct ggcctttgg ggtatgtgctg tgcaagatag taatttccat tgattactac
19 421 aacatgttca ccagcatctt cacccgtacc atgatgagcg tggaccgcta cattgcgtg
20 481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatatc
21 541 tgcacatctggc tgctgtcgtc atctgtggc atctctgaa tagtccttgg aggccacaaaa
22 601 gtcagggaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
23 661 tggggacc tcttcatgaa gatctgcgtc ttcatctttg ctttcgtgat ccctgtcctc
24 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
25 781 ggctcccgag agaaagatcg caacctcggt aggatcacca gactggctt ggtgggtgg
26 841 gcagtttcg tgttctgctg gactcccatt cacatattca tcctggtgga ggctctgggg
27 901 agcacctccc acagcacacgc tgctctctcc agctattact tctgctgc cttaggctat
28 961 accaacagta gcctgaatcc cattctctac gcctttctt atgaaattt caagcgggt
29 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
30 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
31 1141 tgacttagtcg tgga
32

33 **FIGURE 4 AND SEQ ID NO:4**

34 **C1008T polymorphism of hKOR**

35 1 atggactccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgcc
36 61 tgcctgcccc ccaacagcag cgcctggtt cccggctggg ccgagcccgaa cagcaacggc
37 121 agcgcggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
38 181 atcatcacgg cggctactc cgttagtggc gtctgggct tggggccaa ctcgctggtc
39 241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
40 301 ctggctttgg cagatgcttt agttactaca accatgcctt ttcagagtac ggtctacttg
41 361 atgaattcct ggcctttgg ggtatgtgctg tgcaagatag taatttccat tgattactac
42 421 aacatgttca ccagcatctt cacccgtacc atgatgagcg tggaccgcta cattgcgtg

1 481 tgccaccccg tgaaggctt ggactccgc acacccttga aggcaaagat catcaatata
2 541 tgcacatctggc tgctgtcgac atctgttggc atctctgaa tagtccttgg aggcacccaaa
3 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
4 661 tggtgtggacc tcttcatgaa gatctgcgtc ttcatctttg ctttcgtgtat ccctgtcctc
5 721 atcatcatcg tctgtacac cctgtatgtc ctgcgtctca agagcgtccg gtcctttct
6 781 ggctcccgag agaaaagatcg caacctgcgt aggatcacca gactggtctt ggtgggtgt
7 841 gcagtttcg tgttgcgtg gactcccatt cacatattca tcctggtggaa ggctctgggg
8 901 agcacccccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
9 961 accaacagta gcctgaatcc cattcttac gcctttctt atgaaattt caagcgggt
10 1021 ttccgggact tctgtttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
11 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
12 1141 tgacttagtcg tggaa
13

14 **FIGURE 5 AND SEQ ID NO:5**

15 **G36T polymorphism of hKOR**

16 1 atggactccc cgatccagat cttccgcggg gagcctggcc ctacctgcgc cccgagcgcc
17 61 tgcctgcccc ccaacagcag cgcctgggtt cccggctggg ccgagcccgaa cagcaacggc
18 121 agcggccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catccggc
19 181 atcatcacgg cggtctactc cgtagtgttc gtctgggct tggggccaa ctgcgtggc
20 241 atgttcgtga tcacccata cacaaagatg aagacagcaa ccaacatttta catatttaac
21 301 ctggctttgg cagatgcctt agtactaca accatgccct ttcagagttac ggtctacttg
22 361 atgaattccct ggcctttgg ggatgtgtc tgcaagatag taatttccat tgattactac
23 421 aacatgttca ccagcatctt cacccgtacc atgatgagcg tggaccgcata cattggcg
24 481 tgccaccccg tgaaggctt ggactccgc acacccttga aggcaaagat catcaatata
25 541 tgcacatctggc tgctgtcgac atctgttggc atctctgaa tagtccttgg aggcacccaaa
26 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
27 661 tggtgtggacc tcttcatgaa gatctgcgtc ttcatctttg ctttcgtgtat ccctgtcctc
28 721 atcatcatcg tctgtacac cctgtatgtc ctgcgtctca agagcgtccg gtcctttct
29 781 ggctcccgag agaaaagatcg caacctgcgt aggatcacca gactggtctt ggtgggtgt
30 841 gcagtttcg tgttgcgtg gactcccatt cacatattca tcctggtggaa ggctctgggg
31 901 agcacccccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
32 961 accaacagta gcctgaatcc cattcttac gcctttctt atgaaattt caagcgggt
33 1021 ttccgggact tctgtttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
34 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
35 1141 tgacttagtcg tggaa
36

37 **FIGURE 6 AND SEQ ID NO:6**

38 **A843G polymorphism of hKOR**

39 1 atggactccc cgatccagat cttccgcggg gagccggcc ctacctgcgc cccgagcgcc
40 61 tgcctgcccc ccaacagcag cgcctgggtt cccggctggg ccgagcccgaa cagcaacggc
41 121 agcggccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catccggc
42 181 atcatcacgg cggtctactc cgtagtgttc gtctgggct tggggccaa ctgcgtggc

1 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
2 301 ctggctttgg cagatgctt agttactaca accatgccct ttcagagtac ggtctacttg
3 361 atgaattcct ggccctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
4 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
5 481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
6 541 tgcatctggc tgctgtcgct atctgttggc atctctgcaa tagtccttgg aggacccaaa
7 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
8 661 tgggtggacc tcttcatgaa gatctgcgtc ttcatcttgc ctttcgtgat ccctgtcctc
9 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
10 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtgggttg
11 841 gcaggtttcg tcgtctgctg gactccatt cacatattca tccctgggaa ggctctgggg
12 901 agcacccccc acagcacagc tgctctctcc agctattact tctgcatgc cttaggctat
13 961 accaacagta gcctgaatcc cattctctac gcctttcttgc ataaaattt caagcgggtgt
14 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
15 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
16 1141 tgacttagtgc tgga

17
18 **FIGURE 7 AND SEQ ID NO:7**

19 **C846T polymorphism of hKOR**

20 1 atggactccc cgatccagat cttccgcggg gagccgggc ctacctgcgc cccgagcgcc
21 61 tgcctgcccc ccaacagcag cgccttgttt cccggctggg ccgagcccgaa cagcaacggc
22 121 agccgggtc cggaggacgc gcagctggag cccgcgcaca tctcccccgc catcccggtc
23 181 atcatcacgg cggttactc cgtatgtgttc gtcgtgggct tggttggcaa ctgcgtggc
24 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
25 301 ctggctttgg cagatgctt agttactaca accatgccct ttcagagtac ggtctacttg
26 361 atgaattcct ggccctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
27 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
28 481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
29 541 tgcatctggc tgctgtcgct atctgttggc atctctgcaa tagtccttgg aggacccaaa
30 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
31 661 tgggtggacc tcttcatgaa gatctgcgtc ttcatcttgc ctttcgtgat ccctgtcctc
32 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
33 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtgggttg
34 841 gcaggtttcg tcgtctgctg gactccatt cacatattca tccctgggaa ggctctgggg
35 901 agcacccccc acagcacagc tgctctctcc agctattact tctgcatgc cttaggctat
36 961 accaacagta gcctgaatcc cattctctac gcctttcttgc ataaaattt caagcgggtgt
37 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
38 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
39 1141 tgacttagtgc tgga